

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 745-65-3 REGISTRY
CN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11.alpha.,13E,15S)-
(9CI)

(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cyclopentaneheptanoic acid, 3-hydroxy-2-(3-hydroxy-1-octenyl)-5-oxo-,
(-)-

(8CI)

CN Cyclopentaneheptanoic acid,
3.alpha.-hydroxy-2-(3-hydroxy-1-octenyl)-5-oxo-
(7CI)

OTHER NAMES:

CN **(-)-Prostaglandin E1**

CN 11.alpha.,15(S)-Dihydroxy-9-oxo-13-trans-prostenoic acid

CN 11.alpha.,15.alpha.-Dihydroxy-9-oxo-13-trans-prostenoic acid

CN Alprostadil

CN Alprox TD

CN Caverject

CN 1-PGE1

CN **1-Prostaglandin E1**

CN Lipoprost

CN ONO 1608

CN Palux

CN **PGE1**

CN **Prostaglandin E1**

CN Prostandin

CN Prostandin 500

CN SEPA-alprostadil

CN SEPA-PGE1

CN **SEPA-prostaglandin E1**

CN Topiglan

CN U 10136

FS STEREOSEARCH

DR 50-83-9, 22299-37-2, 50865-30-0

MF C20 H34 O5

CI COM

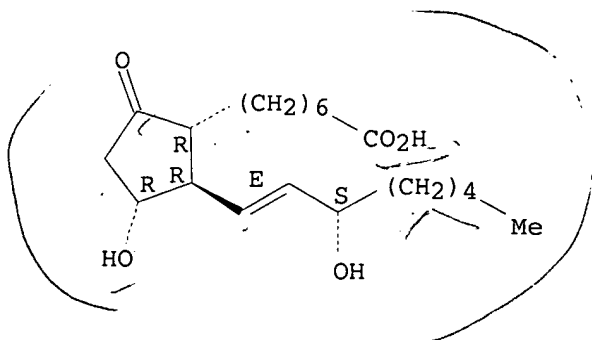
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT,
CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHM, DDFU, DIOGENES, DRUGNL,
DRUGPAT, DRUGU, DRUGUPDATES, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA,
MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PHARMASEARCH,
PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)

Other Sources: EINECS**, WHO

(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

Double bond geometry as shown.



****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

8364 REFERENCES IN FILE CA (1967 TO DATE)
139 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
8368 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s prostaglandin and pge2/cn

1056 PROSTAGLANDIN
5 PROSTAGLANDINS
1060 PROSTAGLANDIN
(PROSTAGLANDIN OR PROSTAGLANDINS)
1 PGE2/CN
1 PROSTAGLANDIN AND PGE2/CN

L6

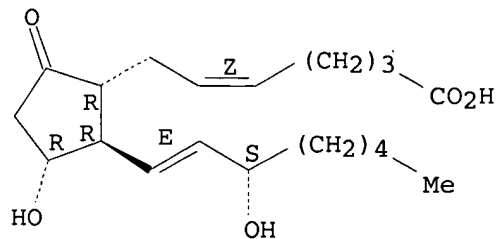
=> d 16

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN 363-24-6 REGISTRY
CN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-9-oxo-,
(5Z,11.alpha.,13E,15S)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 5-Heptenoic acid, 7-[3-hydroxy-2-(3-hydroxy-1-octenyl)-5-oxocyclopentyl]-
(8CI)
CN 5-Heptenoic acid, 7-[3.alpha.-hydroxy-2-(3-hydroxy-1-octenyl)-5-
oxocyclopentyl]- (7CI)
OTHER NAMES:
CN **(-)-Prostaglandin E2**
CN **(15S)-Prostaglandin E2**
CN 11.alpha.,15.alpha.-Dihydroxy-9-ketoprosta-5,13-dienoic acid
CN 11.alpha.,15.alpha.-Dihydroxy-9-oxo-5-cis,13-trans-prostadienoic acid
CN Cervidil
CN Dinoprostone
CN 1-PGE2
CN **1-Prostaglandin E2**
CN Minprostin E2
CN **PGE2**
CN Prepidil
CN **Prostaglandin E2**
CN Prostenon
CN Prostenone
CN Prostine
CN **Prostin (prostaglandin)**
CN Prostin E2
CN U 12062
CN U 42842
FS STEREOSEARCH
MF C20 H32 O5
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS,
BIOSIS,
BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,
CHEMLIST, CIN, CSCHM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB,
IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC,
PHAR, PHARMASEARCH, PROMT, RTECS*, SPECINFO, TOXCENTER, USAN, USPAT2,
USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO

(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

22634 REFERENCES IN FILE CA (1967 TO DATE)
113 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
22654 REFERENCES IN FILE CAPLUS (1967 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

10 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS
 AN 2000:116928 CAPLUS
 DN 132:171116
 TI Topical delivery systems for active agents
 IN Niemiec, Susan M.; Wang, Jonas C. T.; Wisniewski, Stephen J.; Stenn, Kurt
 S.; Lu, Gwang Wei
 PA Johnson & Johnson Consumer Companies, Inc., USA
 SO PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000007627	A2	20000217	WO 1999-US17387	19990802
	WO 2000007627	A3	20000817		
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6284234	B1	20010904	US 1999-360412	19990723
	AU 9956695	A1	20000228	AU 1999-56695	19990802
	EP 1104280	A2	20010606	EP 1999-943639	19990802
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	US 2002048558	A1	20020425	US 2001-916019	20010726
	US 6419913	B1	20020716		
PRAI	US 1998-95289P	P	19980804		
	US 1999-363412	A	19990723		
	US 1999-360412	A1	19990723		
	WO 1999-US17387	W	19990802		

L10 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS
 AN 1992:28143 CAPLUS
 DN 116:28143
 TI Ointments of stabilized prostaglandin E1
 IN Noda, Kanji; Kamikama, Kanehito; Irie, Tetsuyoshi; Arima, Hidetoshi;
 Adachi, Hirotooshi; Saida, Masaru; Yano, Tadanori; Noda, Masahiko; Masako,
 Takafumi; Et, Al.
 PA Hisamitsu Pharmaceutical Co., Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	JP 03083926	A2	19910409	JP 1989-224048	19890829
	JP 07037390	B4	19950426		

L10 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS
 AN 1991:614871 CAPLUS
 DN 115:214871
 TI External preparations of prostaglandin E1
 IN Noda, Kanji; Kamikama, Kanehito; Irie, Tetsuyoshi; Arima, Hidetoshi;
 Adachi, Hirotoshi; Saida, Masaru; Yano, Tadanori; Noda, Masahiko; Masako,
 Takafumi; Et, Al.
 PA Hisamitsu Pharmaceutical Co., Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 03083925	A2	19910409	JP 1989-224047	19890829
	JP 07037389	B4	19950426		

L10 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS
 AN 1987:55617 CAPLUS
 DN 106:55617
 TI **Hair**-tonics containing prostaglandin E1 and/or prostaglandin I2
 IN Katsu, Kenichi; Fukui, Masanori
 PA Daiichi Seiyaku Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 2 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61218510	A2	19860929	JP 1985-58094	19850322
	JP 04073406	B4	19921120		

L10 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
 AN 1978:501455 CAPLUS
 DN 89:101455
 TI Hormones, cyclic nucleotides, and prostaglandins
 AU Belman, Sidney; Troll, Walter
 CS Inst. Environ. Med., New York Univ. Med. Cent., New York, N. Y., USA
 SO Carcinog. - Compr. Surv. (1978), 2(Mech. Tumor Promot. Cocarcinog.),
 117-34
 CODEN: CCSUDL; ISSN: 0145-0158
 DT Journal
 LA English

L10 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
 AN 1978:16460 CAPLUS
 DN 88:16460
 TI Effects of prostaglandins upon **hair** growth in mice
 AU Houssay, Alberto B.; Arias, Norberto H.; Davison, Tomas A.; Epper, Carlos
 E.
 CS Fac. Med., Univ. Buenos Aires, Buenos Aires, Argent.
 SO Acta Physiol. Lat. Am. (1977), 26(3), 186-91
 CODEN: APLTAF
 DT Journal
 LA English

by gonadectomy was studied in male C3H mice. PGE1 (I) [745-65-3] and PGF2.alpha. tromethamine salt (II tromethamine salt) [38562-01-5] were administered twice a day i.p. during 22 days, in daily doses from 1 to 6 .mu.g. The animals had their back clipped and were castrated at the beginning of each expt. At the end of the 22 day exptl. period, all the castrated control mice were completely covered by **hair**, but in the castrated, prostaglandin-treated mice a marked inhibition of **hair** growth was noticed.

ST ~~prostaglandin **hair** growth~~

IT **Hair**

(growth of, prostaglandins inhibition of)

IT Castration

(**hair** growth after, prostaglandins inhibition of)

IT Prostaglandins

RL: BIOL (Biological study)

(**hair** growth inhibition by)

IT 745-65-3 38562-01-5

RL: BIOL (Biological study)

(**hair** growth inhibition by)

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2003:62009 CAPLUS
 DN 138:269459
 TI Host prostaglandin E2-EP3 signaling regulates tumor-associated angiogenesis and tumor growth
 AU Amano, Hideki; Hayashi, Izumi; Endo, Hirahito; Kitasato, Hidero; Yamashina, Shohei; Maruyama, Takayuki; Kobayashi, Michiyoshi; Satoh, Kazutoyo; Narita, Masami; Sugimoto, Yukihiro; Murata, Takahiko; Yoshimura, Hirokuni; Narumiya, Shuh; Majima, Masataka
 CS Department of Pharmacology, Department of Thoracic Surgery, Kitasato University School of Medicine, Kanagawa, 228-8555, Japan
 SO Journal of Experimental Medicine (2003), 197(2), 221-232
 CODEN: JEMEA; ISSN: 0022-1007
 PB Rockefeller University Press
 DT Journal
 LA English
 CC 14-1 (Mammalian Pathological Biochemistry)
 Section cross-reference(s): 1, 2
 AB Nonsteroidal antiinflammatories are known to suppress incidence and progression of malignancies including colorectal cancers. However, the precise mechanism of this action remains unknown. Using prostaglandin (PG) receptor knockout mice, we have evaluated a role of PGs in tumor-assocd. angiogenesis and tumor growth, and identified PG receptors involved. Sarcoma-180 cells implanted in wild-type (WT) mice formed a tumor with extensive angiogenesis, which was greatly suppressed by specific inhibitors for cyclooxygenase (COX)-2 but not for COX-1. Angiogenesis in sponge implantation model, which can mimic tumor-stromal angiogenesis, was markedly suppressed in mice lacking EP3 (EP3-/-) with reduced expression of vascular endothelial growth factor (VEGF) around the sponge implants. Further, implanted tumor growth (sarcoma-180, Lewis lung carcinoma) was markedly suppressed in EP3-/-, in which tumor-assocd. angiogenesis was also reduced. Immunohistochem. anal. revealed that major VEGF-expressing cells in the stroma were CD3/Mac-1 double-neg. fibroblasts, and that VEGF-expression in the stroma was markedly reduced in EP3-/-, compared with WT. Application of an **EP3 receptor antagonist** inhibited tumor growth and angiogenesis in WT, but not in EP3-/. These results demonstrate significance of host stromal PGE2-EP3 receptor signaling in tumor development and angiogenesis. An **EP3 receptor antagonist** may be a candidate of chemopreventive agents effective for malignant tumors.
 ST PGE2 EP3 receptor signaling cancer angiogenesis NSAID
 IT Angiogenesis
 Neoplasm
 (host prostaglandin E2-EP3 signaling regulates tumor-assocd. angiogenesis and tumor growth)
 IT Anti-inflammatory agents
 (nonsteroidal; host prostaglandin E2-EP3 signaling regulates tumor-assocd. angiogenesis and tumor growth)
 IT Prostanoid receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (type EP3; host prostaglandin E2-EP3 signaling regulates tumor-assocd. angiogenesis and tumor growth)
 IT 363-24-6, PGE2 127464-60-2, Vascular endothelial growth factor
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (host prostaglandin E2-EP3 signaling regulates tumor-assocd. angiogenesis and tumor growth)
 RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Amano, H; Jpn J Pharmacol 2001, V87, P181 CAPLUS
 (2) Boku, K; Gastroenterology 2001, V120, P134 CAPLUS
 (3) Daniel, T; Cancer Res 1999, V59, P4574 CAPLUS
 (4) Folkman, J; J Natl Cancer Inst 1996, V82, P4

- (5) Folkman, J; N Engl J Med 1971, V285, P1182 MEDLINE
- (6) Fujita, M; Biochem Biophys Res Commun 2002, V294, P441 CAPLUS
- (7) Fukumura, D; Am J Pathol 1997, V151, P679 MEDLINE
- (8) Futaki, N; Gen Pharmacol 1993, V24, P105 CAPLUS
- (9) Gohongi, T; Nat Med 1999, V5, P1203 CAPLUS
- (10) Goldring, S; J Clin Invest 1990, V85, P798 CAPLUS
- (11) Hanahan, D; Cell 1996, V86, P353 CAPLUS
- (12) Harada, S; J Clin Invest 1994, V93, P2490 CAPLUS
- (13) Hizaki, H; Proc Natl Acad Sci USA 1999, V96, P10501 CAPLUS
- (14) Hoper, M; Am J Respir Cell Mol Biol 1997, V17, P748 CAPLUS
- (15) Hossain, M; J Biol Chem 2000, V275, P27874 CAPLUS
- (16) Kabashima, K; J Clin Invest 2002, V109, P883 CAPLUS
- (17) Ko, S; Proc Natl Acad Sci USA 1977, V74, P3429 CAPLUS
- (18) Majima, M; Br J Pharmacol 2000, V130, P641 CAPLUS
- (19) Majima, M; Jpn J Pharmacol 1997, V75, P105 CAPLUS
- (20) Marx, J; Science 2001, V291, P581 CAPLUS
- (21) Masferrer, J; Ann NY Acad Sci 1999, V889, P84 CAPLUS
- (22) Matsuoka, T; Science 2000, V287, P2013 CAPLUS
- (23) Morikawa, S; Am J Pathol 2002, V160, P985
- (24) Muramatsu, M; J Biol Chem 2000, V275, P5545 CAPLUS
- (25) Murata, T; Nature 1997, V388, P678 CAPLUS
- (26) Namba, T; Nature 1993, V365, P166 CAPLUS
- (27) Narumiya, S; Physiol Rev 1999, V79, P1193 CAPLUS
- (28) Ohshima, M; Cell 1996, V87, P803
- (29) Park, J; Oncogene 2001, V20, P3266 CAPLUS
- (30) Prescott, S; Cell 1996, V87, P783 CAPLUS
- (31) Sawaoka, H; Lab Invest 1999, V79, P1469 CAPLUS
- (32) Segi, E; Biochem Biophys Res Commun 1998, V246, P7 CAPLUS
- (33) Seno, H; Cancer Res 2002, V62, P506 CAPLUS
- (34) Shiff, S; Gastroenterology 1997, V113, P1992 CAPLUS
- (35) Smalley, W; Adv Pharmacol 1997, V39, P1 CAPLUS
- (36) Smith, C; Proc Natl Acad Sci USA 1998, V95, P13313 CAPLUS
- (37) Smith, T; J Clin Endocrinol Metab 1995, V80, P2620 CAPLUS
- (38) Sonoshita, M; Nat Med 2001, V7, P1048 CAPLUS
- (39) Spisni, E; Prostaglandins Leukot Essent Fatty Acids 1992, V47, P111 CAPLUS
- (40) Sugimoto, Y; J Biol Chem 1993, V268, P2712 CAPLUS
- (41) Sugimoto, Y; Science 1997, V277, P681 CAPLUS
- (42) Suzawa, T; Endocrinology 2000, V141, P1554 CAPLUS
- (43) Tsujii, M; Cell 1995, V83, P493 CAPLUS
- (44) Tsujii, M; Cell 1998, V93, P705 CAPLUS
- (45) Tsujii, M; Proc Natl Acad Sci USA 1997, V94, P3336 CAPLUS
- (46) Ushikubi, F; Nature 1998, V395, P281 CAPLUS
- (47) Wakitani, K; Jpn J Pharmacol 1998, V78, P365 CAPLUS
- (48) Watanabe, K; Cancer Res 1999, V59, P5093 CAPLUS
- (49) Wedge, S; Cancer Res 2002, V62, P4645 CAPLUS
- (50) Williams, C; J Clin Invest 2000, V105, P1589 CAPLUS
- (51) Williams, C; Oncogene 1999, V18, P7908 CAPLUS
- (52) Ziche, M; J Natl Cancer Inst 1982, V69, P475 CAPLUS